

# SFY 2015 4th Quarter Final Output Report

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GOAL #2: Protecting America's Waters		Program #4500: Surface Water Regulation	
Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems			
TASK 1.3.4: Surface Water Program Development			
Perform support activities for surface water program including development of program rules, procedures, and policies.			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET    A=ACTUAL	RESPONSIBLE SECTION/ STAFF
PPG  NPS in PPG	1) Implementation procedures for: a) Finalize antidegradation implementation procedures. b) Initiate fish consumption implementation procedures public process. Goal 1, obj. a, strategy ii	T = a)    6/15                      A = 4/15  b)    1/15                      A = 1/15	Surface Water
PPG	2) Finalize triennial review a) Initiate stakeholder process b) Public notice draft rule c) Complete triennial review Goal 1, obj. a, strategy ii	T = a)    4/14                      A = 9/14 b)    8/14 (will be new Pub Not w/new governor) c)    12/14                      See Summary	Surface Water
PPG  NPS in PPG	3) Finalize Lakes Narrative Nutrient Standards* Goal 1, obj. a, strategy i	T = 6/15                      See Summary	Surface Water

\*Pending EPA approval

1.3.4 - FTE Funding Source	FTE	Personnel	ERE	Indirect	Total
WQFF-AZPDES NPS in PPG (Match)	0.18	12,444	5,475	8,413	26,332
NPS in PPG	0.49	29,396	12,934	19,874	62,204
PPG	0.35	17,675	7,777	11,950	37,402
WQARF NPS in PPG (Match)	0.08	4,330	1,905	2,927	9,163
WQFF-AZPDES	0.30	25,823	11,362	17,458	54,644
<b>TOTALS</b>	<b>1.40</b>	<b>89,668</b>	<b>39,454</b>	<b>60,623</b>	<b>189,745</b>

### Year-end Summary

1a- Completed- Antidegradation Implementation Procedures were finalized in the second half of FY15

1b- Completed- A meeting was held in January 2015 with Dept. of Health Services and AZ Game and Fish to determine the public process when issuing fish consumption advisories.

2a- Completed- An initial stakeholder meeting was held on September 29, 2014.

2b- Not met- Since the triennial review was very early in the rule-making process it was determined that ADEQ would have to request a rules moratorium exemption from the new Governor. A request for an exemption was submitted in February 2015.

2c- Not met- see 2b

3- Not met- The Lakes Narrative Nutrient Standards have not been finalized. However, data analysis and interpretation has continued and will result in a revised Arizona Trophic State Index based on elevation categories. The revised matrix will likely result in lower chlorophyll-a endpoints and be based upon annual mean rather than peak season values. Additional information is still needed from the contractor to complete the matrix revision.



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GOAL #2: Protecting America's Waters Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems		Program #4500: Surface Water Regulation	
TASK 1.3.5: Ambient Monitoring Program			
Conduct ambient monitoring program, which includes rivers and streams, lakes and reservoirs, groundwater, and fish tissue and sediment sampling for priority pollutants. Monitoring to include targeted characterization, planning and/or probabilistic sites in support of 305(b) assessment process.			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL	RESPONSIBLE SECTION/ STAFF
PPG  NPS in PPG  106 Mon - 3 106 Mon - 4	1) Conduct ambient monitoring program per FY15 sampling and analysis plan (SAP) throughout Arizona. a) Ambient stream sampling b) Groundwater sampling c) Lake sampling d) Fish sampling  Goal 1, obj. a, strategy i	T = a) 128 stream samples A = 126 of 128 b) 45 groundwater samples A = 82 of 45 c) 20 lake samples A = 29 of 20 d) 30 fish samples A = 30 of 30	Surface Water
PPG	2) Send FY15 SAP to EPA. Goal 1, obj. a, strategy i	2a) 8/14                      A = 7/14	Surface Water
	3) Prepare FY16 ambient monitoring plan. Goal 1, obj. a, strategy i	2) T = 5/15                      A = 5/15	
	4) Complete groundwater basins reports for: a) Avra Valley b) Gila Bend Goal 1, obj. a, strategy i	T = a) 12/14                      A = 11/14 b) 6/15                      A = 6/15	Surface Water
	5) Revise Quality Assurance Project Plan based on EPA comments.	T = 6/15                      A = 3/15	Surface Water

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<b>GOAL #2: Protecting America's Waters</b>		<b>Program #4500: Surface Water Regulation</b>	
<b>Objective 2.2: Protect &amp; Restore Watersheds &amp; Aquatic Ecosystems</b>			
<b>TASK 1.3.5: Ambient Monitoring Program (Cont'd)</b>			
<b>DELIVERABLES:</b>			
<b>GRANT</b>	<b>OUTPUT DESCRIPTION</b>	<b>EVALUATION, DATE OR QUANTITY (CUMULATIVE)</b> <b>T=TARGET A=ACTUAL</b>	<b>RESPONSIBLE SECTION/STAFF</b>

<b>1.3.5 - FTE Funding Source</b>	<b>FTE</b>	<b>Personnel</b>	<b>ERE</b>	<b>Indirect</b>	<b>Total</b>
WQARF NPS in PPG {Match}	4.00	191,974	84,469	129,790	406,232
WQARF NPS Proj 24 [Match]	0.25	11,198	4,927	7,571	23,696
106 Monitoring - 3	0.23	9,559	4,206	6,463	20,228
NPS in PPG	1.91	100,339	44,149	67,837	212,325
PPG	1.67	77,086	33,918	52,116	163,120
106 Monitoring - 4	0.55	24,837	10,928	16,792	52,557
WQARF NPS Proj 25 [Match]	0.10	4,700	2,068	3,178	9,946
WQARF	0.25	9,500	4,180	6,423	20,103
Contract: Ambient Sampling (PPG)					15,000
Contract: USGS (PPG) (WQARF)					90,000
Contract: Ambient Sampling (WQARF)					150,000
<b>TOTALS</b>	<b>8.96</b>	<b>429,193</b>	<b>188,845</b>	<b>290,169</b>	<b>1,163,207</b>

### Year End Summary

Deliverable 1a is off target by 2 samples. During the last run of the year one site was dry and one missed due to medical related issues.

One hundred eighty-five surface water samples were collected during FY15. All programs are now in a joint sampling and analysis plan, which streamlines logistics and budgeting. Forty streams were sampled during FY15 including 3 streams that were never sampled before. Seven lakes were sampled in 2015 and 16 fish sites. All sites were primarily located in warmwater sites (>5,000 feet) throughout Arizona.

Eighty-two groundwater samples were collected during FY15 in the Lower Gila, Salt River, and Gila Bend basins. Reports were completed for the Avra Valley and Gila Bend basins.



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GOAL #2: Protecting America's Waters		Program #4500: Surface Water Regulation	
Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems			
TASK 1.3.6: 106 Monitoring			
Conduct monitoring Initiative (MI) program for implementation of Arizona approved comprehensive monitoring strategy.			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL	RESPONSIBLE SECTION/ STAFF
106 Mon-3 106 Mon-4 NPS in PPG	1) Conduct nutrient monitoring for Rivers and Streams per FY15 sampling and analysis plan. Goal 1, obj. a, strategy i	T = Quarterly	Surface Water
106 Mon-3 106 Mon-4 NPS in PPG	2) Develop recreational monitoring program a) Establish policies and procedures to identify unsanitary beach conditions and work with land owners and health departments to protect human health. b) Begin identification of highly recreated streams and lakes. Goal 1, obj. a, strategy i; Goal 1, obj. b, strategy ii	T = a) 1/15 A = 1/15  b) 6/15 A = 1/15	Surface Water
106 Mon-3 106 Mon-4 NPS in PPG	3) Intermittent Streams a) Pilot test flow sensors on known intermittent streams b) Develop randomized network of flow sensors to develop intermittent stream target population and map. c) Begin to deploy random network flow sensors Goal 1, obj. a, strategy i	T = a) 11/14 A = 11/14 b) 3/15 A = 3/15 c) 6/15 Off target	Surface Water

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<b>GOAL #2: Protecting America's Waters</b>		<b>Program #4500: Surface Water Regulation</b>	
<b>Objective 2.2: Protect &amp; Restore Watersheds &amp; Aquatic Ecosystems</b>			
<b>TASK 1.3.6: 106 Monitoring</b>			
Conduct monitoring Initiative (MI) program for implementation of Arizona approved comprehensive monitoring strategy.			
<b>DELIVERABLES:</b>			
<b>GRANT</b>	<b>OUTPUT DESCRIPTION</b>	<b>EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL</b>	<b>RESPONSIBLE SECTION/ STAFF</b>

1.3.6 - FTE Funding Source	FTE	Personnel	ERE	Indirect	Total
WQARF NPS in PPG (Match)	0.17	8,782	3,864	5,937	18,583
106 Monitoring - 3	0.22	9,143	4,023	6,181	19,347
NPS in PPG	0.22	11,906	5,239	8,049	25,194
106 Monitoring - 4	0.92	44,996	19,797	30,421	95,215
PPG	0.12	6,494	2,857	4,390	13,742
<b>TOTALS</b>	<b>1.65</b>	<b>81,321</b>	<b>35,781</b>	<b>54,980</b>	<b>172,081</b>

### Year End Summary

Deliverable 3c is off-target due to a 6 month hiring delay. This task is also off-target due to a procurement delay in purchasing intermittent flow sensors. The expected completion date is the end of August 2015.

Twenty-seven chlorophyll a and periphyton samples were collected in FY15 in support of the development of the narrative nutrient standard for streams during the spring sampling season. Nutrients (TN & TP) were collected at all sites for all quarters.

Outreach continues for recreational monitoring. We have met with all county health departments (both the environmental side and the human health side). Highly recreated areas have been identified throughout Arizona and policies and procedures have been developed to protect human health in these areas. Future work includes working directly with the Forest Service, which is the primary land owner for the sites ADEQ identified as highly recreated.

Sensors have been bought and deployed for the intermittent stream pilot test. This project has been slowed down due to hiring delays and delays in procuring the solar panels for the cameras. Tony Olsen with EPA has assisted with random site selection and over 80 sites have been evaluated to get 20 target sites. An additional 20 sites will be selected in the following year to complete the study.



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GOAL #2: Protecting America's Waters		Program #4500: Surface Water Regulation	
Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems			
TASK 1.3.7: 305(b) Water Quality Assessment Report and 303(d) List			
Develop Integrated Report and list of impaired waters.			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL	RESPONSIBLE SECTION/STAFF
PPG NPS in PPG	1) Finalize 2012-2014 305(b) Integrated Report and 303(d)-List. a) 45-day AAR Notice begins b) Submit 303(d) List to EPA for approval Goal 1, obj. a, strategy i	T =  a) 12/5/14      A = 1/9/15 b) 2/2/15      A = 3/16/15	Surface Water
PPG NPS in PPG	2) Identify waters that were either delisted or showing water quality improvements as candidates for SP-12 or W-10 success stories. Improvements in both nonpoint and point sources will be evaluated. a) Develop list of candidate waters b) Draft success stories and submit to EPA Goal 4, obj. a, strategy i; Goal 4, obj. b, strategy i	T =  a) 12/14      A 12/19/14 b) 6/15      See Summary	Surface Water
PPG NPS in PPG	3) Begin 2016 305(b)/303(d) Report/List. Goal 1, obj. a, strategy i	T = 4/16      See Summary	Surface Water

1.3.7 - FTE Funding Source	FTE	Personnel	ERE	Indirect	Total
NPS in PPG	0.62	31,459	13,842	21,269	66,570
PPG	0.56	30,098	13,243	20,349	63,690
<b>TOTALS</b>	<b>1.18</b>	<b>61,557</b>	<b>27,086</b>	<b>41,617</b>	<b>130,260</b>

### Year End Summary

Deliverable 1- ADEQ is still waiting for EPA to take formal action on approving the 2012/14 303(d) List. We have been working with R9 staff to answer questions and supply additional data to support their review. ADQE anticipates that final action will occur in FY1 Q1 as there appear to only be a few remaining issues.

Deliverable 2- ADEQ continued to work with EPA R9 to understand the criteria and required format for the success stories using the Turkey and Pinto Creek projects to develop the template for future reference. 2(b) has not been met; Pinto Creek was revised and resubmitted to EPA, however, additional comments were made resulting in the final documents not being completed by the end of FY15. Work on previously identified success story waters will continue in FY16.

Deliverable 3- Planning for the 2016 Assessment began in the second half of FY15. External data uploads into the WQDB continued as the program transitioned to the Monitoring and Assessment Unit. A timeline was developed to keep the project on pace to be submitted to EPA by the end of the state FY16.



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GOAL #2: Protecting America's Waters		Program #4500: Surface Water Regulation	
Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems			
TASK 1.3.8: TMDL Development and Implementation			
Develop TMDL studies and implementation plans to improve surface water quality. Conduct effectiveness monitoring to determine improvements in water quality after BMPs have been implemented.			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL	RESPONSIBLE SECTION/ STAFF
PPG  NPS in PPG	1) TMDL Reports a) Submit 6 TMDL reports to EPA for final approval by June 2015. b) Complete 1 <sup>st</sup> (30 day) public notice for 5 additional TMDLs by June 2015; ( <i>Refer to Table 1 - TMDL Development.</i> ) Goal 1, obj. c, strategy i	T = Semi-Annual Status Table Updates	Surface Water
PPG  NPS in PPG	2) Continuing data collection and analysis for TMDL development. Target is 17 TMDLs on 7 waterbody segments; ( <i>Refer to Table 2 - Continued TMDL Development.</i> ) Goal 1, obj. c, strategy i	T = Semi-Annual Status Table Updates	Surface Water
PPG  NPS in PPG	3) Conduct effectiveness monitoring. a) Monitor the remedial activities on 3 Measure W waterbodies. b) Coordinate with WQIG Unit to track progress in meeting WQD Performance Measure on 5 waters. c) Coordinate with NRCS to conduct effectiveness monitoring on NWQI watershed; ( <i>Refer to Table 3 - Effectiveness Monitoring.</i> ) Goal 4, obj. a, strategies i & ii	T = Semi-Annual Status Table Updates	Surface Water
PPG  NPS in PPG	4) Develop TMDL implementation plans. a) Complete 1 TMDL implementation plan b) Determine status of Phoenix Area Urban Lake Management Plans Goal 1, obj. c, strategies ii & iii	T = Semi-Annual Status Table Updates	Surface Water



## SFY 2015 4th Quarter Final Output Report

GOAL #2: Protecting America's Waters Objective 2.2: Protect & Restore Watersheds & Aquatic Ecosystems		Program #4500: Surface Water Regulation	
TASK 1.3.8: TMDL Development and Implementation (Cont'd)			
DELIVERABLES:			
GRANT	OUTPUT DESCRIPTION	EVALUATION, DATE OR QUANTITY (CUMULATIVE) T=TARGET A=ACTUAL	RESPONSIBLE SECTION/ STAFF
PPG	<p><b>5) Coordinate efforts with EPA.</b></p> <p>a) TMDL staff will participate in monthly conference calls to discuss TMDL development, implementation and effectiveness monitoring results. TMDL staff will join EPA Management, ADEQ Management and Planning Staff on a separate quarterly call to discuss budget related issues (see Task 1.5.2, Deliverable 3c).</p> <p>b) Staff will participate in testing FY 16 Pilot Measure with EPA headquarters and R9.</p>	<p>T = Monthly</p> <p>a) A = 8/7, 8/14, 10/7, 10/23, 11/5, 12/2; 2/15, 3/15, 4/15, 5/15</p> <p>b) A = 7/29, 9/3</p>	Surface Water

1.3.8 - FTE Funding Source	FTE	Personnel	ERE	Indirect	Total
WQFF-AZPDES NPS in PPG {Match}	0.04	2,533	1,115	1,713	5,360
PPG	0.48	31,082	13,676	21,014	65,772
NPS in PPG	2.70	146,746	64,568	99,212	310,526
WQARF NPS in PPG (Match)	0.66	28,384	12,489	19,190	60,063
Contract: TMDL Sampling (WQARF)					20,000
Contract: TMDL Sampling (PPG)					35,000
Contract: TMDL Sampling (NPS in PPG)					10,000
Contract: TMDL Sampling (NPS P&A Base)					
Contract: TMDL Sampling (NPS P&A Incre)					
<b>TOTALS</b>	<b>3.88</b>	<b>208,745</b>	<b>91,848</b>	<b>141,129</b>	<b>506,721</b>

See Tables 1 – 4 below for narrative details regarding the deliverables addressed in Task 1.3.8



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### TMDL Projects Quarterly Status

**1.3.8 Table 1 – TMDL Development Project Completion by June 2015**

Segment (impairment)	Milestone (target)	Actual/Comments
Watson Lake (nutrients, high pH, low D.O.)	45-day AAR Notice begins (12/12/14) 45-day AAR Notice ends (1/26/15) Submit final report to EPA (2/7/15)	The Watson Lake TMDL was appealed by the City of Prescott during AAR review. City of Prescott staff and their respective legal councils met 6/16/15 to discuss settlement of the appeal. Settlement details are currently being negotiated. ADEQ anticipates submitting the final Watson TMDL to EPA for approval by 8/31/15.
Granite Creek- headwaters to Willow Creek (Low D.O., <i>E. coli</i> )	30-day public comment period ends (11/12/15) 45-day AAR Notice begins (3/6/15) Submit final report to EPA (5/4/15)	Public comment on the Granite TMDL closed 1/29/15. Responses to comments are still being developed. The TMDL and responses will be submitted to AAR for public notice during August 2015.
Miller Creek ( <i>E. coli</i> )	Same schedule as Granite Creek <i>E. coli</i> TMDL	See Granite Creek above
Manzanita Creek ( <i>E. coli</i> )	Same schedule as Granite Creek <i>E. coli</i> TMDL	See Granite Creek above
Butte Creek ( <i>E. coli</i> )	Same schedule as Granite Creek <i>E. coli</i> TMDL	See Granite Creek above
Lyman Lake (Hg in fish tissue)	Complete Data Summary Report 4/24/15	This task was not completed due to time spent revising Watson Lake and Granite Creek TMDLs. Prioritization of this task will be reevaluated in FY16.
Alamo Lake (Hg in fish tissue)	Complete Data Summary Report (2/27/15)	This task was not completed due to time spent revising Watson Lake and Granite Creek TMDLs. Prioritization of this task will be reevaluated in FY16.
Parker Canyon	Finalize Data Summary Report (12/19/14)	This task was not completed due to time spent revising Watson Lake and Granite Creek TMDLs. Prioritization of this task will be reevaluated in FY16.



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Queen Creek- headwaters to Superior WWTP (Cu, Pb)	<b>Complete draft TMDL (3/6/15)</b> Public Comment Period begins (5/11/15)	Drafting of the TMDL did not occur in FY15, and will begin in FY16.
Queen Creek- Superior WWTP to Potts Canyon (Cu)		
Queen Creek- Potts Canyon to Whitlow Dam (Cu)		
Arnett Creek- Headwaters to Queen Creek (Cu)		
Unnamed Trib to Queen Creek (-991) (Cu)		
Unnamed Trib to Queen Creek (-1843) (Cu)		
Unnamed Trib to Queen Creek (-472) (Cu)		
Pinto Creek- headwaters to Ripper Spring* (Cu)	<b>Complete Draft TMDL Report (12/5/14)</b>	Draft TMDL has been completed and reviewed internally. Once Triennial Review process begins again a timeline for public comment period will be determined.
Pinto Creek- Ripper Spring to Roosevelt Lake* (Cu)		
Gibson Mine Tributary - Headwaters to Pinto Creek* (Cu)	Public comment period begins (2/2/15)	See above.
	45-day AAR Notice begins (5/29/15)	See above.
Five Point Mountain- Headwaters to Pinto Creek* (Cu)		
Gila River-Centennial Wash to Gillespie Dam (Se, B)	Public comment period begins (12/8/14)	ADEQ delayed the public comment period on this TMDL in order to allow for time to provide direct outreach and education to permittees that would be impacted by the TMDL. The public comment period ended 5/29/15, and responses are currently under internal review. The TMDL will be submitted to AAR for public notice in August 2015.
	45-day AAR Notice begins (4/17/15)	

\*completion dependent upon adoption of Pinto Creek site specific copper standard



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### TMDL Projects Quarterly Status

**1.3.8 Table 2 – Continued TMDL Analysis and Development**

Segment	Impairment	Purpose	Comments
Mule Gulch- headwaters to above Lavender Pit	Cu	Coordinated monitoring with FMI to determine current WQ status	Freeport McMoRan Copper Queen branch verbally agreed to support ADEQ monitoring efforts. A delist report removing pH, Cd, and Zn from the 303(d) List was completed in Q2. Equipment will be installed in Q1 FY16 to restart WQ sampling to determine current conditions.
Mule Gulch- Above Lavender Pit to Bisbee WWTP	Cu, pH	Coordinated monitoring with FMI to determine current WQ status	See Mulch Gulch headwaters to above Lavender Pit
Mule Gulch- WWTP to Highway Bridge	Cd, Cu, pH, Zn	Coordinated monitoring with FMI to determine current WQ status	See Mulch Gulch headwaters to above Lavender Pit
Brewery Gulch- headwaters to Mule Gulch	Cu	Coordinated monitoring with FMI to determine current WQ status	See Mulch Gulch headwaters to above Lavender Pit
Gila River-Coyote Wash to Fortuna Wash	Se, B	Complete delist report (9/1/14)	Delist report was completed August 1.
East Verde River-American Gulch to Verde River	As	Complete draft TMDL or delist report (10/1/14)	It was determined that the arsenic exceedances can be attributed to natural conditions and sampling of pooled, stagnant water in original listing dataset. An arsenic delist report was completed in Q3.
Big Bug Creek Watershed Project	Metals	Complete data summary report 12/31/14	Two additional samples were collected in Q1 ending pre implementation sampling. All water quality data were shared with USFS to aid them in securing funding for implementation of the EE/CA. The data summary draft was submitted for internal review 12/4/14. Finalization of the draft was delayed due to other projects, but is anticipated for FY16 Q1.



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**TMDL Projects Quarterly Status**  
**1.3.8 Table 3 – Effectiveness Monitoring**

Segment	Impairment	Purpose	Comments
Boulder Creek	As, Cu, Zn	Measure W/WQD PM	<p>ADOA contractor began Phase 1 work to determine the feasibility of constructing the access road within budget; to be completed January 2015. ADEQ Compliance continues to work with Hillside Bagdad (middle pile). Their compliance schedule required MSGP NOI and SWPPP to be submitted by 9/30. That deadline was not met.</p> <p>In addition to monthly update phone calls, ADEQ staff conducted site visits in November to see the progress BLM had made on the UTP and to discuss issues that the contractor had consolidating the UTP. An additional two visits were conducted in February to view the finished UTP project and to scout proposed road routes for the LTP. ADOA's contractor has proposed a new road route, and partners will meet with Freeport in early FY16.</p>



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Pinto Creek	Cu	Measure W/WQD PM	ADEQ collected additional stormwater samples in Q1 to measure the effectiveness of Gibson Mine's re-engineered stormwater controls. Analysis indicates that the dissolved copper concentration has been reduced by 85% from pre-remediation levels. Additional relatively minor work could be completed at the site to further improve water quality. Staff drafted a data summary to share with Gibson Mine property owners that documents progress to date and highlights areas where additional work could be completed. Staff also drafted updates to the Pinto Creek SP-12 report, which was submitted to EPA for comment in Q4. In addition, a GIS-based project summary has been drafted to serve as an interactive companion to the SP-12 report. Both the report and GIS summary should be finalized in FY16 Q1.
Turkey Creek	Cu, Pb	Measure W/WQD PM	Additional samples were collected above and below the Golden Belt and Golden Turkey mines in Q1 and Q3. Monitoring will continue into FY16. The SW Stormwater Permits Unit sent a MSGP nonfiler letter to the Blue Belle mine which may be a source of lead, no response has been received.



## SFY 2015 4th Quarter Final Output Report

Tonto and Christopher Creeks	Nitrogen and <i>E. coli</i>	WQD PM	A second summer season sampling program was completed in September. An additional 6 sampling events took place allowing ADEQ to calculate a second consecutive nitrogen annual mean possibly leading to a delist. A data summary report was drafted which includes intensive recreational season data from 2013 and 2014. The report will be finalized FY16 Q1. No annual mean nitrogen exceedances were observed, however, <i>E. coli</i> exceedances were routinely measured when turbidity was elevated.
Upper Little Colorado River	Turbidity	WQD PM/NWQI	A SAP was developed to determine effectiveness of WQIG and NWQI projects in the LCR Headwaters watershed. Contract information has been received for 2 NWQI projects. Effectiveness monitoring and BMPD evaluation data was collected for a total of 6 grant projects.
San Pedro NWQI watershed	<i>E. coli</i>	NWQI	A SAP was developed to determine effectiveness of WQIG and NWQI grants in the San Pedro watershed. Contract information was received for 2 NWQI projects; ADEQ staff has met with landowners for both projects and sampling is planned for FY16. Effectiveness monitoring and BMP evaluation data was collected for a total of 5 grant projects.
Additional WQD PM waters as warranted		WQD PM	3 reaches of the LCR, Rainbow Lake, Butte Creek, and Manzanita Creek were added to the Master Target List in FY16. Success in meeting the WQD PM is tracked by waterbody and individual pollutant, with 103 reach/pollutant combinations on the list.

Measure W- 2002 Baseline Waters

WQD PM- Water Quality Division Performance Measure

NWQI- NRCS National Water Quality Initiative

**TMDL Projects Quarterly Status**  
**1.3.8 Table 4 –Implementation Plans**

Segment	Comments
Determine status of Phoenix Area Urban Lake Management Plans- develop or implement as needed	There was no activity on this project during FY15 due to competing priorities. The development of a lake management plan template has been included in the FY16 workplan.
Queen Creek (multiple reaches, 1 TIP)	No activity on this project due to the delay in TMDL development.

REVISED JULY 1, 2014